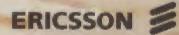
ERICSSON MOBILE PHONE EH 237





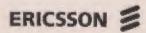




Ericsson EH237

Handheld Telephone for the TACS and ETACS Cellular Telecommunications Networks

User's Manual



This manual describes Ericsson EH237, Type 1341, all versions

First edition (September 1993)

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District Control

Printed in Sweden.

APPROVED for connection to telecommunication systems specified in the instructions for use subject to the condition set out in them.



S/1208/4/P/502763

This apparatus is approved for connection to any TACS cellular network run by Racal-Vodafone Limited and Cellnet (Telecom Securicor Cellular Radio Limited). The facilities offered by the apparatus are identical on any network in so far as a network is able to support any particular facility.

Service providers can arrange for the necessary adjustments on the network or networks whose service they provide.

Safety and Precautions

- Turn off your cellular telephone when in an alrcraft. The
 use of cellular telephones in an aircraft may be dangerous
 to the operation of the aircraft, disrupt the cellular network
 and is illegal. Fallure to observe this instruction may lead to
 suspension or denial of cellular telephone services to the
 offender, or legal action, or both.
- Turn off your cellular telephone when at a refuelling point.
- Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots, chemical plants, or where blasting operations are in progress.
- There may be a hazard associated with using your cellular telephone close to personal medical electronic devices, such as hearing aids and pacemakers.
- Operation of your cellular telephone close to other electronic equipment, such as televisions, radios and personal computers may cause interference.
- Do not dismount the antenna. If a child gets it into the throat, there may be a suffocation risk.
- Do not attempt to dismantle your cellular telephone yourself.
 There are no user-serviceable parts inside.
- Do not expose your cellular telephone to rain or spill beverages on it.
- The telephone package includes plastic bags. Keep plastic bags away from children.



- Have your cellular telephone installed in a vehicle by qualified personnel.
- If you use your cellular telephone in a vehicle, it is advised
 that a handheld microphone or telephone handset should
 not be used by the driver while the vehicle is moving, except in an emergency. Speak only into a fixed neck slung or
 clipped-on microphone when it would not distract your attention from the road. Do not stop on the hard shoulder of a
 motorway to answer or make a call, however urgent.
- Use only Charger 4225 and AC/DC Converter 4222-UK, Charger 4226 and AC/DC Converter 4222-UK, or Travel charger 4223-UK with this telephone. Use of any other battery charger and/or AC/DC Converter will invalidate any approval given to this telephone and may be dangerous.

Battery Information

A battery that is delivered with the phone is not charged. However, there may be enough power to turn the phone on.

Before using the phone, it is recommended that you condition the battery by first charging it, and then disharging it, three times in succession. See the chapter **Batteries and Recharging** for information about battery conditioning.

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Introduction

About the Phone



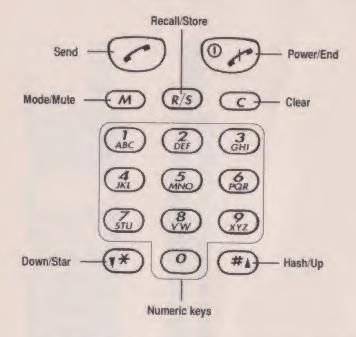
This phone is a very small and light handheld cellular phone which is simple to use. After you have turned it on, you can use it in much the same way as any other phone.

However, a cellular phone operates by using radio signals which can be subject to interference. It may sometimes happen, therefore, that you need to move the phone to a position where you can obtain a better radio signal.

Indoors, it is usually best to use the phone near a window.

Display and Keypad







This key has two different functions: Power and End.



Power. To turn the phone ON or OFF, press and hold down the key for at least half a second. A click confirms when the phone is actually turned on or off. You cannot, however, turn the phone off when a call is in progress.



End. To terminate a call, press the key momentarily.

What This Manual Contains

This manual is provided to help you use your phone. Keep it handy to answer questions you may have.

The next chapter, Basic Operation, describes the most essential operations:

- Turning the phone on/off.
- Making calls and answering calls.

Correct care will prolong the life of a battery and also the length of time between recharging. You should, therefore, read the third chapter, **Batteries and Recharging**, carefully.

To learn more about the display, with its status indicators, and the functions of the various keys, you should read the fourth chapter, *Details on the Display and Keys*. Also the phone's audible and visual signals are dealt with in this chapter.

Then you can go on to read about the more advanced functions, including, for example:

- Storing a phone number and an accompanying name in the memory of the phone.
- Recalling a phone number from memory, by entering the name, or part of the name (Alphabetic Mode), or by entering the number of the memory location (Numeric Mode).
- Performing "banking by phone" and utilising other services, by means of DTMF Signalling.
- Using the Special Functions, for example, the Electronic Lock to restrict the use of the phone by somebody else.

Optional equipment that can be used with the phone, for example a handsfree system for use in a vehicle, is dealt with in the chapter Accessories.

The **Problems You Can Solve** chapter at the end of the manual could save the cost of unnecessary service. It lists some simple things to be checked before calling for service personnel.

Read the Information from Your Cellular Operator!

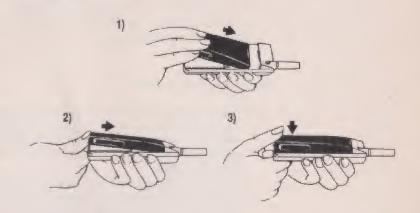
You should also read the operating instructions from your network operator about coverage areas of the cellular network and services such as call forwarding (call divert) and call barring.

Do You Want Another Language in the Display?

Your phone is normally delivered with English texts in the display. Special Function No. 12. allows you to select a language other than English. Refer to the chapter Special Functions.

Basic Operation

Attaching the Battery



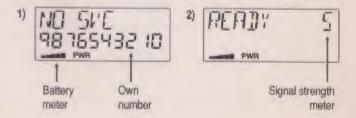
Turning the Phone On



Press and hold down the Power key until you hear a click.

Attaching a battery, will also turn the phone on.

The battery meter and the PWR (Power) indicator come on in the display. The phone's own number is displayed briefly.



The message NO SVC (No Service) is displayed, too, However, once service is available from the cellular network, usually within a few seconds, the message NO SVC disappears from the display and, instead, the message READY comes on. In addition, the indicator light on the top

of the phone, blinks green at a slow rate. You can now make and receive calls.

A signal strength meter is shown on the right of the display. It indicates the strength of the received signal, 1 to 5. A value of 5 indicates a strong signal.

The battery meter is shown in the shape of five bars. They indicate the condition of the battery attached to the phone; the more bars shown, the better the condition of the battery. You can read more about this in the next chapter, Batterles and Recharging.

Note the following points:

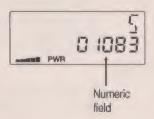
- If the message NO SVC shows continuously, you have lost contact with the cellular network and cannot, therefore, make or receive any calls. Refer to the chapter Problems You Can Solve at the end of this manual for further information.
- If no signal strength is shown, or the signal strength is low, try moving the phone or the vehicle to obtain a stronger signal. Refer to the chapter Problems You Can Solve.
- If the indicator (Roaming) shows continuously, or blinks, in the display, it indicates that the phone is used in a network other than its home network.
- If the message LOCKED is shown, instead of the message READY, the phone is locked, fully or partially, to prevent outgoing calls. Refer to the description of Special Function No. 11. Electronic Lock in the chapter Special Functions.
- If the message KEYLOCK is shown, the keypad is locked to prevent unintentional key action. Refer to the section Keypad Lock at the end of this chapter.
- If the message ANTENNA comes on, it indicates that the antenna is not connected. Turn the phone off, and attach the antenna. Never remove or attach the antenna when the phone is on.

Entering a Phone Number



If anything is shown in the numeric field of the display, erase it before entering the phone number using the C (Clear) key.

A phone number to be called, or stored in memory, is entered on the numeric keys. The digits you enter are shown in the numeric field of the display.



As each digit is entered, a click or tone is heard, unless the key clicks or key tones have been turned off with Special Function No. 3. Key Clicks, Key Tones or Silent Keypad. Refer to the chapter Special Functions.

Always use the area code:

Note that there are no local calls when you are calling from a cellular phone; you must always include the area code (STD code) before the desired number. The only exceptions to this are certain cellular service numbers.

If you enter a wrong digit or a wrong number:



If you enter a wrong digit, you can erase it by pressing C (Clear). You can press C repeatedly to erase several digits, one at a time.

To erase all digits simultaneously, press and hold down C until the digits disappear from the display.

If a number contains more than 10 digits:

If you enter a number with more than 10 digits, the first digits will disappear from the display.





If you wish to check these digits, press M (Mode), followed by 0. CHECK is displayed, together with the digits.

Making a Call



The phone must be turned on and the message NO SVC must not be displayed.



Enter the number, including the area code, and press Send.

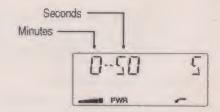
The symbol comes on in the display.

When you have made contact with the cellular network, the message CALLING will be displayed.

When you are connected to the desired phone number, the message **CALLING** and the phone number disappear from the display and a click is heard. Only then need you hold the phone to your ear.

Call Time Meter

During an outgoing call the **elapsed time**, in minutes and seconds, is displayed.



Audible Call Timer

If Special Function No. 4. Minute Minder is turned on, a click is heard in the earphone or handsfree speaker every full minute during the call. To turn the audible call timer on, refer to the chapter Special Functions.

Call Unit Meter

On special request, the number of **call units** can be displayed, instead of the elapsed time, provided the chosen cellular network offers this facility.



The audible call timer is automatically disabled if the call unit option is chosen,

Ending a Call



When the conversation is finished, press End.

The symbol disappears from the display but the elapsed call time (the number of call units) appears for an additional five seconds. If nobody answers, or you hear an engaged or equipment-engaged tone, or you receive a recorded message that a number is unobtainable:



Press End. The phone number will be retained in memory and you can easily repeat the call. See Last Number Re-dial below.

If a beep is heard and the message NO ACCESS is displayed briefly:

The cellular network is busy and cannot process your call. The phone number disappears from the display. It will, however, be retained in memory and you can easily repeat the call. See Last Number Re-dial below.



If turned on, Special Function No. 7. Automatic Re-try, will automatically re-dial the number. See the chapter Special Functions.

If a beep is heard and the phone number remains in the display:

Either the message NO SVC is displayed, or the signal strength is too low. Refer to the chapter Problems You Can Solve at the end of this manual for further information.

Last Number Re-dial



If necessary, clear the numeric field of the display, using the C (Clear) key.





Press 0, followed by Send, to make the call.

LASTDIAL is displayed, together with the number last called.

See also the chapter Using the Dialling Memory.

Emergency Calls

One or more emergency numbers can be programmed into your phone.





To call the first emergency number, press M (Mode) followed by ▼* (down). EMERGENCY is displayed, togethor with the first number.

If more than one emergency number is programmed, pressing any numeric key (repeatedly) will display the numbers.

To call the number displayed, press Send.

Receiving a Call



The phone must be turned on and the message NO SVC must not be displayed.

When you are called, the phone rings. At the same time, the message CALL appears in the display. The indicator light on the top of the phone blinks green at a fast rate.



Press Send to answer.



If the telephone is used with handsfree equipment, you can press any key to answer a call. There is also a Special Function, No. 10. Voice-Activated Answering that allows you to answer a call by using your voice. Refer to the chapter Special Functions.

Ending a Call



When the conversation is finished, press End.

Unanswered Calls

If a call is not answered, the indicator light on the top of the phone will continue to blink green at a fast rate, indicating that somebody has called you.

The number of unanswered calls will also be displayed, followed by the word CALL or CALLS, for example 1 CALL or 2 CALLS.

The blinking indicator light and the number-of-unansweredcalls indication will go out if you press Send, M, R/S or C.

Volume Control

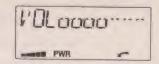




During a conversation, you can adjust the volume of the earpiece, or the handsfree speaker, with these keys.

Press ▼ ★ (down) momentarily to decrease the volume and #▲ (up) momentarily to increase the volume. Each time you press ▼ ★ (down) or #▲ (up) momentarily, the volume is altered by one step, the full range being seven steps.

The volume setting is shown in the display. The more Os that are shown, the higher the volume. The volume setting remains in the display two seconds after ▼* (down) or #▲ (up) was last pressed.



Two Independent Volume Settings

You can have one setting when you use the phone as a handheld unit and another setting when you use its as a handsfree phone. Both settings will remain unchanged, after the phone has been turned off.

Microphone Mute



During a conversation, you can deactivate the microphone (or the handsfree speaker) by **holding down M** (Mute). The word **MUTED** is shown in the display.

To resume the conversation, release the M key.

Hook Flash



Pressing Send during a call sends a hook flash. This is used to activate or cancel certain cellular services such as call waiting and conference calls.



You may not access these cellular services unless you have subscribed to them.

Scratch Pad during a Conversation

You can use the display as a scratch pad during a conversation. If the person you are talking to gives you a phone number, you can enter it as it is given to you.

After you have ended the call, the number remains in the display, and you can call it by pressing just Send. The number is, however, stored automatically in memory location 1 of the phone's dialling memory so that you can call it later if you do not have the opportunity to make the call at once. Refer to the chapter *Using the Dialling Memory*.

Keypad Lock

If the phone is used as a handheld unit, you can lock the keypad so that unintentional key action has no effect if the phone is turned on. This feature is useful when you, for example, are carrying the phone in a pocket.



You can, however, call the emergency numbers programmed into the phone, when the keypad is locked.

The keypad remains locked until you:

- answer an incoming call
- replace the battery, or
- unlock the keypad yourself.

To lock the keypad:





Press M (Mode), followed by Power/End.

KEYLOCK is displayed.

To unlock the keypad:

Press M, followed by Power/End.

Turning the Phone Off



To turn the phone off, press and hold down the Power key until a click is heard.

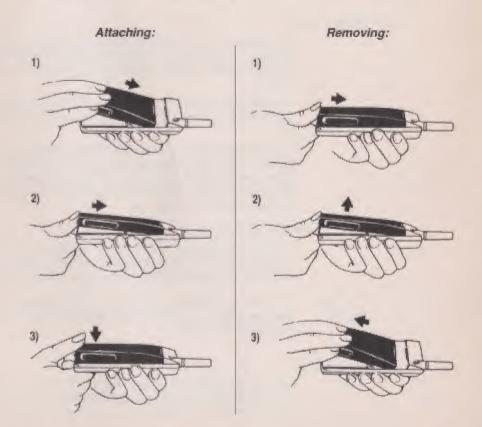
Batteries and Recharging

Batteries

The batteries that can be used with this phone are of the NiMH type. (NiMH stands for Nickel Metal Hydride.) Compared to the commonly used NiCd (Nickel Cadmium) batteries, the NiMH batteries have a higher capacity and they are much more friendly to the environment.

At present, there are two types of battery – standard and high-capacity batteries.

Attaching and Removing a Battery



Battery Meter

The battery meter, at the bottom left corner of the display, reflects the state of charge of the battery attached to the phone.



If the battery is fully charged, five bars are shown. As the battery loses charge, the number of bars is reduced. When all bars have disappeared from the display, the battery is empty, or almost empty.

Low Battery Alarm

As a reminder that the battery soon needs recharging or replacing, an alarm signal (a long beep) sounds and the message LOWBATTERY appears for ten seconds in the display.

In addition, the PWR indicator starts blinking in the display, and the light on the top edge of the phone starts blinking red.

If the phone is left on, after the low battery alarm has been issued, it will turn itself off when the battery is no longer able to power it satisfactorily. Then, it is not possible to turn the phone on again. Instead, the battery must be recharged, or replaced with a charged one.

Low battery alarm during a call:

If the low battery alarm is Issued when a call is in progress, you should end the call as quickly as possible. If the call continues, the phone will turn itself off after a short period.



The battery can be replaced while a call is in progress. The new battery must be attached within five seconds of the old being removed.

Battery Discharge

When the phone turns itself off, after the low battery alarm has been issued, the message **DISCHARGE** appears in the display and the indicator light on the top of the phone

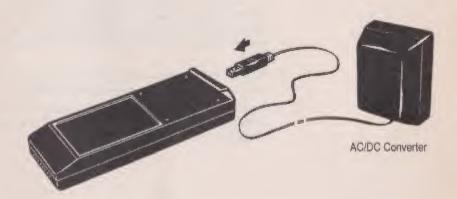
shows a steady orange light. This indicates that the phone is now discharging the battery.



If you have the opportunity, let the battery remain attached to the phone, to discharge it completely. Do not remove it until the message DISCHARGE and the orange light go out. Not until then is the battery completely discharged. Recharging a battery completely, will help to enhance its lifetime.

Recharging a Battery

Using the Standard Charger



The charger, delivered with the phone, is to be used indoors together with an AC/DC converter. It can be used to recharge both standard and high-capacity batteries.



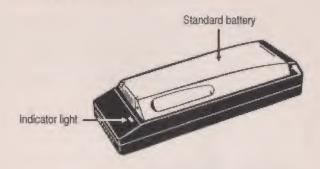
Use only the AC/DC converter provided with the charger. Use of any other AC/DC converter may be dangerous.

Never recharge a battery with the basic charger when the ambient temperature is below 5 °C or above 40 °C

Connnecting the standard charger:

- 1. Connect the AC/DC converter to the charger.
- Plug the AC/DC converter into a mains socket. The indicator light on the charger should flash to inform that power is connected property.

Recharging a battery:



 Attach the battery in the same way as you would attach it to the phone.

A red light comes on to indicate that the battery is being recharged. An empty standard battery will be fully recharged within approximately 2 hours; an empty high-capacity battery within approximately 4 hours.

A green light replaces the red light when recharging is complete, and you can now remove the battery.

However, no harm will come to the battery if left in the charger. When a battery is fully recharged, the charger changes to trickle-charging the battery.

Conditioning a Battery

A battery that is delivered with the phone is not charged. To obtain best battery performance and long battery life, you should condition the battery.

Also a used battery that has been stored for a long period of time may require conditioning to retain its normal capacity.

To condition a battery properly, recharge and discharge it completely three times in succession.

To discharge a battery completely, proceed as described in the section **Battery Discharge** earlier in this chapter.

Battery Care and Maintenance

A battery has a long maintenance-free service life if properly treated.

- Never let a battery get into contact with metal objects that may short-circuit the battery poles, for example a bunch of keys in a pocket.
- Avoid recharging a battery before the low battery alarm has been issued. Should you often do so, the battery's ability to accept a charge will be impaired, with the result that the battery can only be used for shorter and shorter periods between recharges. Such a battery can, however, be conditioned using the method described in the preceding section.

A hint:

If you are uncertain of the state of charge of a battery, you can attach the battery to the phone. If the phone does not come on, the battery is probably empty.

On the other hand, if the phone comes on, observe the bars of the battery meter.

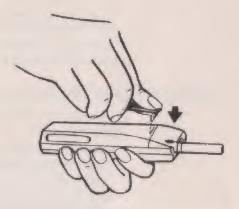
 The battery is all right.				
 The battery can be used.				
The battery is almost empty.				
The battery is empty.				

There is also a Special Function, No. 18, which lets you read off the battery voltage. Refer to the chapter Special Functions.

Belt Clip

A clip is delivered with each battery. You can mount the clip to a battery without using any tools.

Insert the clip into the slot on the battery until you hear a click.



Once mounted, the clip should not be removed from the battery.

Details on the Display and Keys

Display



Alphanumeric Field

- Displays names and memory location numbers (as illustrated above).
- · Displays messages, queries and warnings.
- Displays the strength of the received signal.
- Displays the elapsed call time, or the number of call units, while an outgoing call is in progress.

Numeric Field

Displays the phone number entered on the keypad, or recalled from memory.

Status Indicators

Refer to the preceding chapter, Batteries and Recharging.

PWR Power

Shows continuously to indicate that the phone is ON. Blinks to indicate that the battery is becoming exhausted.

Roaming

Optional indicator. Either shows continuously, or blinks, to indicate that the phone operates on a network other than its home network (roaming).

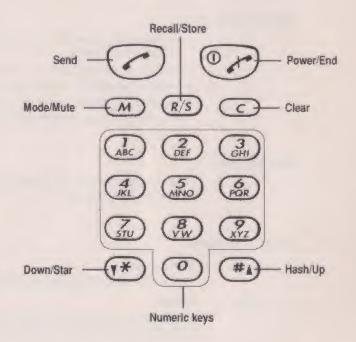


The handset symbol is shown during a call and also while an outgoing call is being connected.

ABC Alphabetic Mode

Blinks to indicate that you can enter letters and other characters with the numeric keys 0 − 9, and the ▼ * (star) and #▲ (hash) keys. This is used to enter names when storing and recalling phone numbers.

Keypad





Send

Used to **make** a call after a number has been entered, or recalled from memory, and to **answer** an incoming call. It can also be used to send a **Hook Flash** while a call is in progress.





Last Number Redial

To call the number last dialled, press 0, followed by Send.



This key has two different functions: Power and End.



Power

Press and hold down to turn the phone ON or OFF.



End

Press momentarily to terminate a call.

Press momentarily to exit from the Special functions of the phone.

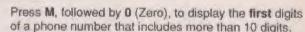


This key has two different functions: Mode and Mute.

1. Mode

Used to select the secondary function of other keys. Press M momentarily. The text FCN (Function) comes on in the display. Then press the other key within 10 seconds:









Press M, followed by Send, to send the digits in the numeric field of the display as DTMF signals when a call is in progress. If the numeric field is empty, pressing M, followed by Send will select DTMF Mode. Refer to the chapter DTMF Signalling.





Press M, followed Power/End, to lock/unlock the keypad.





Press M, followed by R/S, to select the Store function. Refer to the chapter Storing Numbers.





Press M, followed by C, to enter a pause (P). A pause is used to separate two codes that are to be sent as DTMF signals. Refer to the chapter DTMF Signalling.







Press M twice, or M followed by #▲ (up), to select the first Special Function. Further pressing M or #▲ repeatedly, will scroll through all the Special Functions. Refer to the chapter Special Functions.

Details on the Display and Keys

M	*	To select the last Special Function, Emergency Number, press M followed by ▼ ★ (down).
M	(3)	A Special Function can also be selected by pressing M, followed by the number (one or two digits) of the Special Function. Refer to the chapter Special Functions .
	M	Mute – Privacy key Hold down M to mute the microphone during a conversation. If the phone is used with handsfree equipment, the separate microphone will be muted.
	R/S	Recall/Store This key is used both to recall phone numbers from memory and to store numbers in memory.
	R/S	Recall Press R/S and then enter the number of the memory location (one, two or three digits). Refer to the chapter Recalling Numbers.
R/S)	R/S)	Alphabetic Recall Used to recall a phone number stored under a name. Press R/S twice. Then enter the first letter(s) of the name. Refer to the chapter Recalling Numbers.
R/S) 0	(R/S)	Last Number Recall Press R/S, lollowed by 0 and R/S again, to recall the number last called. Refer to the chapter Using the Dialling Memory.
(R/S)	(# A)	Dialling Memory Press R/S, followed by # (hash), to recall the number stored in memory location 1 of the dialling memory. Refer to the chapter Using the Dialling Memory.
		2. Store
M	R/S)	Press M, followed by R/S to store a phone number (and name) in memory. Refer to the chapter Storing Numbers.
M R/S	(#A)	Press M, followed by R/S and # (hash) to store a phone number in memory location 1 of dialling memory. Refer to the chapter Using the Dialling Memory.
	R/S)	Press just R/S to store a setting that you have selected for a particular Special Function. Refer to the chapter Special Functions.



Clear

- If pressed momentarily, it erases the last digit or letter entered. Can be pressed repeatedly to erase several characters.
- If held down, it erases all digits, for example a phone number, from the display.
- 3. Exits from the Special Functions of the phone.

Numeric keys



Used to enter phone numbers to be called, or stored in memory.



Used to enter memory location numbers when recalling phone numbers from the memory.



When in aiphabetic (letter) mode, letters can be entered with the keys 1 – 9. To enter a letter, press the appropriate key once, twice, or three times according to the position of the desired letter on the key. To enter a digit in Alphabetic mode, press the appropriate key four times.





These keys have two different functions:

1. ▼ (down) and ▲ (up)

Volume control

Press A momentarily to Increase or Tomomentarily to decrease the earpiece volume when a call is in progress. If the phone is used with handstree equipment, the loudspeaker volume will be adjusted.

Forward and backward scroll

▲ scrolls forward and ▼ scrolls backward through the memory locations, or the names stored in memory, or through the Special Functions of the phone.

2. * (star) and # (hash)

Used to enter the characters * and #. A * appears in the display as an H and a # as an o.

* is used in alphabetic mode to enter a space. Pressing * twice, enters a star.

Pressing # in alphabetic mode, enters a hyphen (-).
Pressing # twice, enters a hash.

Illumination

The display and keys are back lit.

If the phone is used as a **handheld** unit, i.e. it is powered from the attached battery, the back light is automatically turned off about ten seconds after the last key was pressed, to save the battery. However, if you are making a call, the back light will not be turned off until the call has been connected.

The back light comes on again when you press a key, or when a call is received.

You can turn the back light OFF all the time with Special Function No. 5. Refer to the chapter Special Functions.

If the phone is powered from an external source via the receptacle at the bottom of the phone, the back light will be ON all the time, unless you have turned the It OFF with Special Function No. 5.

Audible Signals

Ringing Signal

The ringing signal sounds when a call is received. It will be repeated until you answer the call, or the call is terminated by the cellular network. Special Function No. 1 allows you to adjust the volume of the ringing signal. You can also turn the ringing signal OFF. Special function No. 2 allows you to adjust the tone of the ringing signal.

You can have one volume and tone setting when you use the phone as a handheld unit and another setting when you use it as a handsfree phone.

Low Battery Alarm Signal

A long beep will be heard when the attached battery is becoming exhausted. The warning LOWBATTERY will be displayed for ten seconds. The PWR Indicator blinks in the display. Refer to the preceding chapter, Batteries and Recharging.

Error Signal

A short beep tells you if you do something wrong. For example, if you try to store a phone number in a memory location that is already in use.

Confirmation Click

When you hold down the **Power** key, a click tells you when the phone is actually turned on or off.

When you are making a call, a click is heard when you have made contact with network.

Key Clicks or Tones

There is a special function, No. 3, to allow you to decide whether feedback clicks or tones will be heard when you press the keys. You can also turn the clicks and tones OFF, Refer to the chapter *Special Functions*.



Turning the clicks and tones off, will also turn the low battery alarm and error signals off,

Visual Signals

There is an indicator light on the top edge of the phone.

Slow green blink or steady green light - Service is available

If the phone is used as a **handheld** unit, the slow green blink means that service is available from a cellular network. You can both make and receive calls.

If the phone is powered from an external source via the receptacle at the bottom of the phone, a steady green light is shown instead of the slow green blink.

Fast green blink - Incoming call

Fast green blink means that someone is calling, or has called you.

Red blink - Low battery

Red blink means that the attached battery is becoming exhausted.

Steady orange light - Battery Discharge

Finally, when the battery is not able to power the phone satisfactorily, a steady orange light comes on, indicating that the phone has turned itself off and is now discharging the battery. Refer to the preceding chapter, **Batteries and Recharging**.

Using the Dialling Memory

The last six numbers called are stored in a dialling memory.

This comprises six memory locations:

and 1 – 5.

The last number called will always be stored in memory location 0, the second to last number in memory location 1, and so on.

When all six memory locations are occupied, the sixth to last number, will be lost when a new call is terminated.

A phone number will, however, not be stored twice in the dialling memory. If a number which is already present in the dialling memory is called, the "old" number will be deleted.

Using the Dialling Memory as a Scratch Pad

Besides the phone numbers that are stored automatically each time a call is ended, you can enter phone numbers yourself into the dialling memory.

- a. You may take a note of a phone number given to you during a call by entering the phone number on the keypad. When you end the call by pressing End, the number is automatically stored in memory location 1.
- Independent of whether a call is in progress or not, you can enter a phone number and store it by pressing M (Mode), followed by R/S (Store) and # (hash).







STORED DM is displayed. The number is stored in memory location 1.

Last Number Redial

- If required, clear the numeric field of the display, using the C (Clear) key.
- Press 0, followed by Send, to make the call.





LAST DIAL is displayed together with the number last called.

Recalling the Number Last Called

To review the number before making the call:

 Press R/S (Recall), followed by 0 and R/S again.







LAST DIAL is displayed together with the number last called.

2. Press Send to make the call.



Recalling the Other Numbers

 Recall the number last called as described above, or Press R/S, followed by #A (hash).



MEMORY 1 is displayed, together with the number stored in memory location 1.

- You can then scroll forward or backward through the memory locations of the dialling memory by pressing #▲ (up) or ▼★ (down) until you find the desired number.
- 3. Press Send to make the call.

Reviewing the First Digits if a Recalled Number Contains More than 10 Digits

If you recall a phone number which contains more than 10 digits, the first digits will be displayed first, followed after a few seconds by the remaining digits.

If you wish to check the first digits, press M, followed by 0.





Storing Numbers

Vou can store up to 199 phone numbers in the memory of the phone.

Phone numbers can be stored both when the phone is in standby mode and during a conversation.

A phone number to be stored may contain up to 32 digits.

A phone number can be stored in a memory location with, or without, an accompanying name.

A name may contain up to 10 letters. including spaces.

Storing a Number (and Name)

- 1. Enter the phone number you wish to store, including the area code.
- 2. Press M (Mode) followed by R/S (Store).





STORE is displayed, followed by the number of the first free memory location.

- To store the number in this memory location, go to step 5, below.
- 4. To store the number in a different memory location, enter the number of this memory location (one, two or three digits).
- 5. Press R/S again. The question NAME? appears and the As. (Alphabetic mode) Indicator blinks in the display. This indicates that you can now enter an accompanying name.

Enter the first letter of the name by pressing the appropriate numeric key once, twice or three times, depending on the position of the letter on the key. For example, pressing the 1 key twice enters a B.

When an underline character () appears to the right of the letter entered, you can enter the next. You can enter up to ten letters.

- If you want to enter a digit. (1 - 9) instead of a letter, press the appropriate numeric key four times. To enter the digit 0, press the 0 key.
- If you want a space, press the ▼* (star) key once. Pressing * twice, enters a star.
- If you want a hyphen (-), press the #A (hash) key once. Pressing # twice. enters a hash.
- If you make a mistake, correct it with the C key.
- 7. When you have entered the entire name, press R/S. The number and name is stored.

STORED is displayed, followed by the memory location number. The display then returns to normal.

If you do not press R/S, the number and name will be stored automatically after about 20 seconds.

If you change your mind and do not wish to store the number and name, press and hold down C within these 20 seconds.





If you do not wish to enter a name, just press R/S when the question NAME? appears. The number will then be stored without a name.

Memory Protection

If you try to store a number in a memory location which already contains a number, a beep is heard and the message **USED** appears in the display for five seconds.

You can then choose either to:

- Store the number in a different memory location. Enter the number of this memory location and press R/S,
- Store the number in the selected memory location, thus erasing the old number (and name). Just press R/S.

Memory Full

If, when you attempt to store a new number, all memory locations are in use, STORE LOC? is displayed.

If you do not wish to store the number, press C.

If, on the other hand, you do wish to store the number, you can do one of the following:

- a. Store the number temporarily in the dialling memory. Press # (hash). STORED DM is displayed. See also the chapter Using the Dialling Memory.
- Store the number in an already occupied memory location, thus erasing the old number (and name). Enter the required memory location number and press R/S.

Erasing a Stored Number (and Name)

A previously stored phone number (and name) will be erased automatically if you store a new number in the same memory location.

However, you can erase a number without replacing it with a new number, by proceeding as follows:

- If there is anything showing in the numeric field of the display, erase it with the C key.
- Press M, followed by R/S. ERASE is displayed.
- Enter the memory location number (one, two or three digits).
- Press R/S again. A beep is heard and USED is displayed.
- Press R/S again. ERASED is displayed. The number (and name) is erased.

Some Hints

Characters * and

In addition to the digits 0 − 9, the characters ★ (star) and # (hash) can be stored.

This allows you to store sequences for activating and cancelling certain cellular sevices, such as call forwarding (call divert) and call barring. Refer to the operating instructions from your network operator.

Then you can activate or cancel such a service, by recalling the sequence from memory and pressing Send.



If a call is in progress when you enter a sequence including characters ★ or # you must hold down the ▼ ★ or # ▲ key until the ★ or # appears in the display.

A momentary depression of the ▼* or #▲ key will alter the earpiece or loudspeaker volume.

Partial Numbers

It is sometimes useful to store just the initial part of a number, or the initial part of several numbers, a **partial number**, for example an area code.

Later, when you recall a partial number, you can append the remaining digits, using the numeric keys.

Memory Locations 1 to 10

If you lock the phone partially (LOCK PRIV), only the phone numbers stored in memory locations 1 – 10 can be recalled. See also the description of Special Function No. 11. Electronic Lock in the chapter Special Functions.

If partial numbers, for example area codes, are stored in these memory locations, all outgoing calls, except calls to these partial numbers, are barred when the phone is partially locked.

Recalling Numbers

Numeric and Alphabetic Mode

If you wish to recall a stored phone number from memory, press the R/S (Recall) kev.

Numeric mode applies automatically after you have pressed R/S. It means that you can recall the phone number by entering the number of the memory location.

If you wish to recall the phone number by using the name, or the first part of the name, you have to select alphabetic mode by pressing R/S again within 10 seconds. The *e, indicator blinks in the display to indicate that you have selected alphabetic mode.



If you select alphabetic mode. by mistake, press R/S once again. You can then enter a memory location number instead.

Recalling a Number Using Numeric Mode

1. Press R/S.



RECALL --- is displayed.

- 2. Enter the number of the memory location (one, two or three digits). Memory location 1, for example, can be entered as 1, 01 or 001. The (name and) phone number. stored in that location, appears in the display.
- To call the number, press Send.



Scrolling through the Memory

You can display the contents of each memory location, occupied by a (name) and number, by scrolling forward or backward through the memory.

1. Press R/S.



RECALL --- is displayed.

- Enter a memory location (one. two or three digits), to begin scrolling with this number.
- To scroll forward, press #▲ (up) repeatedly. To scroll backward, press * (down) repeatedly.





To call the number displayed. press Send.



Speed Calling

The numbers stored in memory locations 1 - 99 can be called by just entering the memory location number (one or two digits) and then pressing Send.

The number appears in the display. If the number was stored with an accompanying name, the name will be displayed briefly.



H you called a wrong number, you can press End before the call has been connected.

Recalling a Number Using Alphabetic Mode

1. Press R/S twice.



The question NAME? appears and the As, indicator blinks in the display.

2. Enter the first letter of the name by pressing the relevant numeric key once, twice or three times. depending on the position of the desired letter, and press R/S or # (up).







at you wish, you can enter up to six letters before pressing R/S or # . For example, to recall the number stored under the name ANTHONY. you can enter A, AN, ANT, ANTH, ANTHO or ANTHON.

The first name that begins with the letter(s) entered, is displayed. together with the phone number.

3. If the desired name is not displayed, scroll forward by pressing #A (up) until you find it. If you scroll past the name you can move back by pressing * (down).





4. To call the number displayed, press Send.



Scrolling through the Memory

1. Press R/S twice.

The question NAME? appears and the As, indicator blinks in the display.

Press #A (up) repeatedly to scroll forward through the names. or press ▼* (down) repeatedly to scroll backward through the names.



You can enter a letter before pressing #▲ (up) or ▼* (dawn), to begin scralling with this letter.

To call the number displayed, press Send.

Reviewing the First Digits if a Recalled Number Contains More than 10 Digits

If you recall a phone number which contains more than 10 digits, the first digits will be displayed first, followed after a few seconds by the remaining digits.

If you wish to check the first digits, press M, followed by 0.





Appending Digits to a Recalled Number

If you have stored a partial number, you can recall it from memory and then append the remaining digits. using the numeric keys.

Replacing the Last Digits of a Recalled Number

A number recalled from memory can be altered by erasing the last digits using the C key, and then entering new digits.

"Hidden" Memory Locations

This feature allows you to store up to 10 credit card account numbers, or other access codes, in "hidden" memory locations.

The numbers may contain up to 32 digits. In addition to the digits 0 – 9, the characters * (star) and # (hash) may be included.

Each number can be stored with an accompanying name with up to 10 characters.

The "hidden" memory locations are designated *0 to *9.



To be able to store or review a credit card account number, you must enter your 4-digit security code correctly. The phone is factory-programmed with a security code of 0000. You should change this to any 4-digit personalised code using Special Function No. 11. Electronic Lock. Refer to the chapter Special Functions.

Storing a Number (and Name)

The procedure for storing a credit card account number in a hidden memory location number is similar to the procedure for storing a telephone number, described in the chapter Storing Numbers earlier in this manual.

 Enter the credit card account number you wish to store.



If a call is in progress when you store a "number" including the character ★ or #, you must hold down the ▼ ★ or

#▲ key until the * or # appears in the display.

A momentary depression of the ▼ * or # ▲ key will after the earpiece or loudspeaker volume.

Press M (Mode), followed by R/S (Store).

STORE is displayed, followed by number of the first free memory location.

 Enter the number of the "hidden" memory location, for example *0, and press R/S again.

CODE? --- is displayed.

- 4. Enter your 4-digit security code.
- If you entered the code correctly, the question NAME? appears and the ^{ABC} (Alphabetic mode) indicator blinks in the display. You can now enter an accompanying name.
- Enter the name (maximum 10 letters) and press R/S.

If you do not wish to enter a name, just press R/S.

The number (and name) is stored.

STORED is displayed, tollowed by number of the "hidden" memory location number. The display then returns to normal.

Sending a Number

 Call the desired phone number and wait until the call has been connected. Press R/S (Recall) and then enter the memory location, for example *0.

The credit card account number is not displayed, just the name store with it, if any, and the number of the "hidden" memory location, for example *0.

- If you entered a wrong memory location number, you can scroll through the "hidden" memory locations by pressing #▲ (up) or ▼ ★ (down).
- Send the credit card account number by pressing M (Mode) followed by Send.





XMIT *0 is displayed. The individual digits of the credit card account number are converted to DTMF signals and sent, one digit at a time. The concept of DTMF is explained in the chapter DTMF Signalling later in this manual.

Reviewing a Number

You can review a credit card number when the phone is in standby mode.

- Press R/S (Recall) and then enter the memory location, for example *0.
- Press R/S again. The question CODE? appears.
- 3. Enter your 4-digit security code.
- If you entered the code correctly, (the name and) credit card account number is displayed.
- You can scroll forward or backward through the "hidden" memory locations using #▲ (up) or
 ★ (down).

Erasing a Number (and Name)

A credit card number is erased from memory in the same way as an ordinary phone number. Refer to the section *Erasing a Stored Number (and Name)* in the chapter *Storing Numbers* earlier in this manual.

DTMF Signalling

TMF (Dual Tone Multi Frequency) signalling means that you can use your phone to perform "banking by phone" and utilize other services.

Automatic DTMF



Tones must be heard when you press the keys. If clicks or nothing is heard. you must select Special Function No. 3. Key Clicks. DTMF Tones or Silent Keypad and turn the DTMF lones on (DTMF BURST or DTMF CONTinous). Refer to the chapter Special Functions.

Pressing the numeric keys 0 - 9, ▼ * (star) and #▲ (hash) during a call will automatically send the corresponding DTMF signals.

If you have chosen the Burst option, a burst of signal will be sent when you press a numeric key. With the Continuous option, a signal will last as long as a numeric key is held down.



The keys ▼ * and # A have dual functions when a call is in progress. They serve as a volume control, too.

Pressing ▼ * (down) or #▲ (up) momentarily, will decrease or increase the earpiece or loudspeaker volume by one step.

Too send a * or a#, you must hold down the key for two seconds. Not until then will the * or # be sent.

Repeating the DTMF signals:

The characters entered and sent remain in the display. You can send them again by pressing M (Mode), followed by Send.





The characters in the display are converted to DTMF signals and sent automatically, one character at the time,



If you have entered more than 32 digits, the first digits will not be sent.

DTMF Mode

If you often send the characters * and # you might find it a nuisance having to hold down * * and # ... keys. Then you should use the following method.



It is irrelevant whether clicks. tones or nothing is heard when you press the keys.

- 1. Call the desired number and wait until the call has been connected.
- Make certain that nothing is shown in the numeric field of the display. If necessary, erase it using the C (Clear) key.
- 3. Press M. followed by Send, to switch to DTMF mode.





The message DTMF ON comes on in the display.

DTMF Signalling

- 4. You can now send DTMF signals by pressing keys 0 - 9, ▼* (star) and # (hash). A signal will last as long as a key is held down. In the meantime, the microphone is deactivated to avoid interference during the transmission of the DTMF signals.
- 5. When you are finished, you can either:
 - a. Press M, followed by Send, to return to conversation mode. The message DTMF OFF is displayed briefly.
 - b. Press End to terminate the call

DTMF Pause Function

If you wish to send a code (a sequence of characters), for example your personal access number, it could sometimes be advantageous to use the pause function. You can then enter both the phone number and the code before making the call.



It is irrelevant whether clicks, tones or nothing is heard when you press the keys.

You can proceed as follows:

- Enter the desired phone number.
- 2. Enter a pause by pressing M, followed by C.





A pause appears as a P in the display.

3. Enter the code you wish to send. The code can be any combination of the digits 0 - 9 and the characters * and #

You may enter a maximum of 32 characters, including the phone number and the pause.



If you make a mistake, while entering the characters, you can correct with the C key.

- Make the call by pressing Send. When the call has been connected, the phone number and the pause, P, disappear from the display.
- To send the code, press M, followed by Send.





Repeating the code:

The code remains in the display and you can repeat it by pressing M, followed by Send, again.

Using Several Pauses

Several pauses can be entered to separate different codes, for example:

<Phone. No.> P <Code1> P <Code2> P <Code3>.

You can enter a maximum of 32 characters, including the pauses.

Pressing M, followed by Send, during a call, will send the characters up to the next pause.

Repeating the codes:

After all codes have been sent, you can repeat them, one by one, by pressing M, followed by Send.

Pre-programmed **DTMF Signalling**

You can store a code in memory in the same way as you store a phone number.

The code can be any combination of the digits 0 - 9 and the characters * and #, and it may contain up to 32 characters.

To send the code:



It is irrelevant whether tones, clicks or nothing is heard when you press the keys.

- Call the desired phone number and wait until the call has been connected.
- Recall the code from memory. The digits appear in the display.
- 3. Send the code by pressing M, followed by Send.



You can store several codes if you separate them by pauses (P). However, the total number of characters must not exceed 32.

Alternative method:

You can also store a phone number. together with one or more codes, separated by pauses. The total number of characters must not exceed 32.

To make the call and send the code. proceed as follows:

- 1. Recall the number and the code from memory.
- 2. Make the call by pressing Send.
- When the call has been connected, the phone number and the pause, P, disappear from the display.
- 4. To send the code, press M. followed by Send.

If more than one code was stored. pressing M and Send again, will send the next code.

A Hint



After you have sent DTMF signals, the characters will remain in the display. They will automatically be stored in memory location 1 of the dialling memory when you end the call. To avoid this, erase the characters, using the C key, before you end the call.

Special Functions

The Special Functions are arranged in the following order:

Special Function
Ringing signal volume.
Ringing signal tone.
Key clicks, key tones tones or silent keypad.
Minute minder.
Back light.
Display contrast.
Automatic re-try.
NAM Selection.
Country selection.
Voice-activated answering.
Electronic lock – Call restrictions
Language selection.
Call counter.

15 TOTAL XXXX	Resettable total call time/ call units.
16 ACCUM XXXX	Total call time/call units.
17 CH IND OFF CH IND ON	Channel indication.
18 VOLT X X	Battery voltage.
19 ENQUIRY	Enquiry number.
20 EMERGENCY	Emergency number

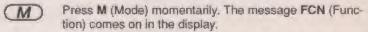
Some of the Special Functions are optional and will not be available unless you have ordered them.

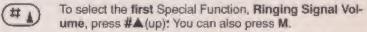
Some of the Special Functions will not be available when a call is in progress – other Special Functions will not be available when the phone is locked to prevent unauthorised use.

Special Function No. 10. Voice Activated Answering will only be available if the phone is used with handstree equipment.

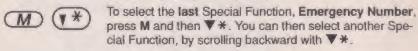
Special Function No. 18. Battery Voltage will not be available if the phone is powered from an external source via the receptacle at the bottom of the phone.

Accessing a Special Function









Instead of pressing #▲ or ▼ * repeatedly, you can hold down the key to scroll forward or backward respectively.

Alternative Method for Accessing a Special Function

If you often use a particular Special Function, you will remember its number. Then it could be more advantageous to use the following method to access that Special Function.



Press M and enter the number of the Special Function (one or two digits). For example, entering 14, takes you to the Last Call Time function.

If you try to access a Special Function that is inaccessible, the message NOT AVAIL will be displayed briefly and the display returns to normal.



For brevity, we have mainly referred to the alternative access method in the descriptions of the various Special Functions later in this chapter.

A Combination of the Two Methods

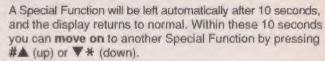




If you know the number of a Special Function roughly, press M and enter a lower number. Then scroll forward using #\(\text{(up)} \).

Leaving a Special Function







To leave the Special Functions, press C (Clear) or End momentarily.



A Special Function will be left automatically if somebody calls you. Press Send to answer.

Changing a Setting

You can change the setting of certain Special Functions. For example, with Special Function No. 4. Minute Minder, you can turn the minute minder ON or OFF.



Press any numeric key to change the setting from ON to OFF, or vice versa.

The Minute Minder function has two settings only. If you press a numeric key a second time, the initial setting reappears. Other Special Functions have several settings, and you may have to press a numeric key repeatedly until the initial setting reappears in the display.

Storing a New Setting

Pressing R/S (Store), #▲ (up) or ▼* (down) will store the new setting.

R/S If you wish to store the setting and then leave the Special Functions, press R/S.

If you wish to store the setting and then **go on** to another Special Function, press #▲ or ▼ *.

Press #▲ once again to move on to the next Special Function, or ▼* to move back to the preceding Special Function.

If you do not press R/S, #▲ or ▼ * within 10 seconds, the new setting will be stored automatically, and you will leave the Special Functions.

if you wish to leave the Special Functions without storing anything, press C (Clear) or End momentarily, within these 10 seconds.



1. Ringing Signal Volume

You can set the volume of the ringing signal in three steps. You can also choose a ringing signal that rises in steps from the lowest to the highest level, or turn the ringing signal OFF.

1. Press M twice. The current setling appears in the display, either:

RING LOW, or RING MED. or RING HIGH, or RING STEP, or RING OFF.

2. Press any numeric key (repeatedly) to set the ringing volume, LOW. MED(ium), HIGH, (in) STEP(s), or turn the ringing signal OFF.

Each setting is accompanied by an audible ringing signal,

3. Store the new setting by pressing R/S. * * or # ..



You can have one volume setting when you use the phone as a handheld unit. and another setting when it is powered from an external source.

If you turn the ringing signal OFF, two clicks will inform you of an incoming call. The indicator light on the top of the phone will blink, too.

2. Ringing Signal Tone

You can adjust the tone of the ringing signal in three steps. You can also choose a mixed tone.

1. Press M, followed by 2. The current setting appears, either:

TONE LOW, or TONE MED, or

TONE HIGH, or TONE MIXED.

- 2. Press any numeric key (repeatedly) to set the ringing tone, LOW, MED(lum), HIGH or MIXED. Each setting is accompanied by an audible ringing signal.
- Store the new setting by pressing. R/S. V * or # ..



You can have one tone setting when you use the phone as a handheld unit, and another setting when it is powered from an external SOUTCO.

3. Key Clicks, Key Tones or Silent Keypad

You can choose whether key clicks. key tones or neither will be heard when you prass the keys.

In the case of key tones, DTMF signals corresponding to the keys 0 - 9. * (star) and # (hash) will be sent if these keys are pressed when a call is in progress (automatic DTMF).

You can also decide whether a burst of DTMF tone will be heard when a numeric key is pressed, or whether a continuous DTMF tone will last as long as a numeric key is pressed, allowing for a long DTMF signal to be sent when required, as with some message services.

1. Press M, followed by 3. The current setting appears, either:

CLICK ON (key clicks audible), or DTMF BURST (burst of DTMF signal audible), or DTMF CONT (continuous DTMF signal audible), or SILENT (key clicks and tones turned off).

- 2. Select the desired setting by pressing any numeric key (repeatedly).
- 3. Store the new setting by pressing R/S, ** or #A.



Turning off the key tones and clicks, will also turn off the error and low battery alarm signals.

Minute Minder 4.

This Special Function gives an indication of the time spent during conversation by emitting a short beep in the earpiece or handsfree loudspeaker every full minute.

- 1. Press M. followed by 4. The current setting, either M MIND OFF or M MIND ON, appears.
- 2. Turn the minute minder ON or OFF by pressing any numeric key.
- Store the new setting by pressing R/S. ▼ * or # ...



If you have chosen the Call Unit option, the minute minder is automatically disabled.

Back Light 5.

The illumination of the display and keypad will be turned OFF automatically about ten seconds after last key was pressed, to save the battery.

This Special Function lets you turn the illumination OFF all the time.

- 1. Press M. followed by 5. The current setting, either LIGHT AUTO or LIGHT OFF, appears.
- 2. Turn the Illumination ON or OFF by pressing any numeric key.

3. Store the new setting by pressing R/S. ▼ * or # ...



When the phone is powered from an external source. the illumination will be ON all the time, if the LIGHT AUTO setting is chosen.

6. **Display Contrast**

You can adjust the angle of the display in three steps to obtain the best viewing.

- 1. Press M, followed by 6. The current setting, either CONTRAST 0, CONTRAST 1 or CONTRAST 2 appears.
- 2. Adjust the view angle by pressing any numeric key (repeatedly).
- 3. Store the new setting by pressing R/S. V * or #A.



You can have one contrast setting when you use the phone as a handheld unit. and another setting when it is powered from an external source.

7. Automatic Re-try

This Special Function will automatically re-dial a number when an outgoing call has failed because the cellular network is busy.

The re-dial will be repeated until the call is answered or three times at the most.



Pressing any key, will interrupt the automatic re-try function. To interrupt the re-try function when a re-dial is in progress, the End key must be pressed.

The automatic re-try function is enabled/disabled as follows:

- 1. Press M, followed by 7. The current setting, either RETRY OFF or RETRY ON, appears.
- 2. Turn the automatic re-try ON or OFF by pressing any numeric key.
- 3. Store the new setting by pressing R/S, V * or #A.

8. NAM Selection

Optional function.

The Dual NAM (Number Assignment Module) facility of the phone allows you to subscribe to two cellular networks. However, the phone can only be active in one of the two networks at a time.

This Special Function lets you change from the phone number registered in the one network, NAM1, to the phone number registered in the other network, NAM2, or vice versa.

You can also select AUTO NAM. This means that the phone number registered in the first network (NAM1) will be used, provided that service is available from this network. If not, the phone will automatically check to see if service is available from the other network. The phone will then use the other phone number (NAM2) if service is available.

- 1. Press M, followed by 8. The current setting appears, either: NAM1 ONLY together with the one number, or NAM2 ONLY together with the other number, or AUTO NAM.
- 2. Press any numeric key (repeatedly) until the desired setting is displayed.

3. Store the new setting by pressing R/S. V * or #A.



If one phone number only is programmed into your phone, NAM 1 ONLY and the phone number will be shown in the display. Press C or End to leave the Special Functions, or ▼* or #. to go on to another Special Function.

9. Country Selection

Optional function.

If you can use your phone in more than one country, proceed as follows to select country.

- 1. Press M, followed by 9. The name of the present country appears.
- 2. Press any numeric key (repeatedly) until the name of the desired country is displayed.
- Store the new country by pressing R/S. ▼* or #A.

10. Voice-Activated Answering

This facility will only be available if the phone is used with handsfree equipment.

This facility lets you answer a call by using your voice. A confirmation beep will sound when the call is connected.

- 1. Press M, and then enter 10. The current setting, either VOICE OFF or VOICE ON, appears.
- 2. Turn the Voice-Activated Answering facility ON or OFF by pressing any numeric key.
- Store the new setting by pressing R/S. V * or #A.

Electronic Lock Call Restrictions

You can prevent unauthorized use of your phone by restricting outgoing calls. Incoming calls, however, can still be answered. If the user tries to make a disallowed call, the message RESTRICTED appears in the display and a beep sounds,

There are three levels of restricting outgoing calls:

- LOCK PRIV(ate) Partial lock
 Calls can only be made to the emergency numbers programmed into the phone and to phone numbers recalled from memory locations 1 10. It is not possible to change a recalled number and then make a call. Digits can, however, be appended to it. Therefore, you could store partial numbers in memory locations 1 10. A partial numbers may consist of, for example, an area code only.
- LOCK ALL Full lock
 Bars all outgoing calls, except calls to the pre-programmed emergency numbers.
- LOCK INTER Lock for international calls only
 Prevents calls to phone numbers that include too many digits.



When the phone is partially or fully locked, the message LOCKED is displayed, instead of the message READY. Phone numbers cannot be stored in, or erased from, memory. The dialling memory cannot be used; only the number last called can be recalled. Some of the Special Functions will be inaccessible, too.

Changing Your Security Code



In order to lock or unlock the phone, you must enter your personal tour-digit security code correctly. Your phone is factory-programmed with a security code of 0000. You should change this to any four-digit personalised code.

- Press M, and then enter 11.
 The current setting appears, either UNLOCK (Unlocked), LOCK PRIV, LOCK ALL or LOCK INTER.
- Press any numeric key (repeatedly) until CHG CODE (Change Code) appears.
- Press R/S. The question OLD? appears.
- Enter the present four-digit security code.
 If you entered the code correctly,
- the question NEW? appears.

 5. Enter the new four-digit security
- code. The prompt AGAIN? appears.
- Enter the new security code again.

If you entered the code correctly, NEW CODE appears briefly and the display returns to normal.

Locking the Phone or Changing the Lock Level

- Press M, and then enter 11.
 The current setting appears, either UNLOCK (unlocked), LOCK PRIV, LOCK ALL or LOCK INTER.
- Press any numeric key (repeatedly) until the desired setting LOCK PRIV, LOCK ALL or LOCK INTER appears.

- Press R/S. The question CODE? appears.
- Enter your four-digit security code.
 If you entered the code correctly, the question LOCK NOW? appears.
- 5a. If you wish to lock the phone immediately, press R/S, If you chose to lock the phone partially or fully, LOCKED is displayed. If you chose to lock the phone for international calls only, the display returns to normal.
- 5b. If you do not wish the lock to come into effect until the phone is turned off, press any other key. The display returns to normal.

Unlocking the Phone Temporarily

If the phone is fully or partially locked, the message LOCKED is displayed. If the phone is locked to prevent international calls only, the message READY will, however, still be displayed.

- If anything is shown in the numeric field of the display, erase it using the C key.
- Enter your tour-digit security code. If you entered the code correctly, UNLOCK is displayed briefly.

The unlocking is temporary only, and the phone will be locked again when turned off.

Unlocking the Phone Permanently

- Press M, and then enter 11.
 The current setting appears, either LOCK PRIV, LOCK ALL or LOCK INTER.
- Press any numeric key repeatedly until UNLOCK appears.
- 3. Press R/S. CODE? is displayed.

 Enter your four-digit security code.
 If you entered the code correctly, the display returns to normal.

12. Language Selection

This Special Function lets you select a language other than English to be shown in the display.

- Press M, and then enter 12. The current language, for example ENGLISH, is displayed.
- Press any numeric key (repeatedly) until the desired language appears.
- Store the new language by pressing R/S, ▼* or #▲.

From now on, all messages appearing in the display will be in the language you selected.

Call Counter

This Special Function allows you both to read off the number of outgoing calls made and to reset the call counter to zero.

Reading Off the Call Counter

- Press M, and then enter 13. CALLS is displayed, followed by the number of outgoing calls made.
- Press C or End to leave the Special Functions, or ▼ * or # ▲ to move on to another Special Function.

Resetting the Call Counter

The number of outgoing calls is displayed for 10 seconds.

 Press any numeric key within these 10 seconds. The question RESET? appears. Press R/S, ▼* or #▲ to reset the call counter. (To retain the meter reading, press C or End.)

14. Last Call Time/ Last Call Units

When you purchase your phone, you have to decide whether you require the call time display or the call unit display. The call unit option is available on special request, provided that the chosen network offers this facility.

This Special Function lets you read off the elapsed time, or the number of call units, of the last outgoing call.

- Press M, and then enter 14.
 LAST is displayed, followed by the elapsed time (in minutes and seconds), or the number of call units, of the last outgoing call.
- Press C or End to leave the Special Functions, or ▼* or #▲ to move on to another Special Function.

Resettable Total Call Time/ Resettable Total Call Units

This Special Function lets you read off the total elapsed call time, or the total number of call units, of outgoing calls.

You can also reset the Total Call Time/Call Units meter to zero.

Reading Off the Total Call Time/ Call Units Meter

 Press M, and then enter 15.
 TOTAL is displayed, followed by the total elapsed call time (in full minutes), or the total number of call units, since the call time/call units meter was reset last time.
 Press C or End to leave the Special Functions, or ▼* or #▲ to move on to another Special Function.

Resetting the Call Time/Call Units Meter

The total elapsed time, or the total number of call units, is displayed for 10 seconds.

- Press any numeric key within these 10 seconds. The question RESET? appears.
 - Press R/S, ▼ * or # ▲ to reset the call time/call units meter. (To retain the meter reading, press C or End.)

Total Call Time/ Total Call Units

This Special Function lets you read off the total elapsed call time, or the total number of call units, of outgoing calls since the phone was purchased.

- Press M, and then enter 16.
 ACCUM is displayed, followed by the total elapsed call time (in full minutes) or the total number of call units.
- Press C or End to leave the Special Functions, or ▼* or #▲ to move on to another Special Function.

Channel Display

Optional function.

The channel number of the cellular network that is presently used by your phone can be shown continuously in the display.

 Press M and then enter 17. The current setting, either

- CH IND OFF or CH IND ON, appears.
- Turn the channel display ON or OFF by pressing any numeric key.
- Store the new setting by pressing R/S, ▼* or #▲.

18. Battery Voltage

This function will not be available if the phone is powered from an external source.

You can read off the voltage of the attached battery.

- Press M and then enter 18.
 VOLT is displayed, followed by two digits, which represent the battery voltage.
 - Note that a space is shown instead of a decimal point, 6 3, for example, means 6.3 volts.
 - The voltage of a fully charged battery is at least 6.8 — a battery which is almost empty has a voltage of 6.1, or less.
- Press C or End to leave the Special Functions, or ▼ * or #▲ to move on to another Special Function.

19. Enquiry Number

- Press M, and then enter 19 to display the enquiry number for the country selected. ENQUIRY is displayed, together with the number.
- Press Send to call the enquiry number, or C or End to leave the Special Functions, or ▼ * or #▲ to go on to another Special Function.

20. Emergency Number

One or more emergency numbers for each country can be programmed into the phone.

- Press M, followed by ** (down)
 to display the first emergency
 number for the country selected.
 EMERGENCY is displayed,
 together with the number.
- If more than one emergency number is programmed, pressing any numeric key (repeatedly) will display the number(s).
- Press Send to call the number displayed, or C or End to leave the Special Functions, or ▼ * or #▲ to go on to another Special Function.

Accessories

Handsfree Usage in a Vehicle



Handstree Holder



If a standard battery is attached to the phone, fold out a support before inserting the phone in the holder.

A handstree kit is available for vehicular use of your phone.

The kit incorporates a complete system for handsfree usage, powering the phone from the vehicle's battery, and recharging the standard or high-capacity battery attached to the phone.

An external antenna should be used for better telephone communication.

When the phone rests in the holder, the internal microphone and earpiece are disabled. Instead, an external microphone and a loudspeaker, which is built into the holder, are used.

The handsfree leature allows you to make or answer calls without removing the phone from the holder. You can comfortably have a telephone conversation and still have both hands on the wheel.

Service Available indicator

The indicator light on the top edge of the phone shows a **steady green light** when service is available from a cellular network.

Battery recharging

When the phone is ON, the attached standard or high-capacity battery is recharged. In the meantime, the bars of the battery meter walk from left to right, to indicate that recharging is in progress.

When the battery is fully recharged, all five bars light continuously,

Illumination

The display and keypad are illuminated as long as the phone is ON.

Accessories

You can, however, turn the illumination OFF with Special Function No. 5, Back Light. Refer to the chapter Special Functions.

Operation

When the phone is used with the handsfree system, its operation is essentially the same as described earlier in this manual. However, there are some points to be noted.

Any Key facility

You can press any key key to answer an incoming call.

Voice-Activated Answering

If you enable Special Function No. 10, Voice-Activated Answering, you can answer an incoming call by using your voice. A confirmation beep sounds when the call is connected.

Refer to the chapter Special Functions.



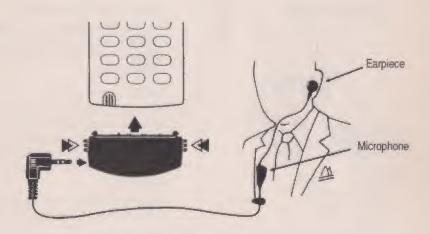
To prevent unnecessary discharge of the vehicle's battery, the phone should not be left in the holder for extended periods of time when the vehicle is not running.

Portable Handsfree

The portable handsfree set is plugged into the receptacle at the bottom of the phone.

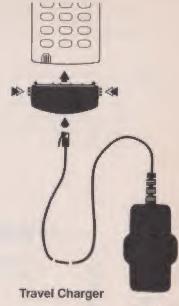
Any Key and Voice-Activated Answering facilities

The Any Key and Voice-Activated Answering facilities, described in the preceding section, are available when the portable handstree set is used.



Portable Handstree





To mains socket

Vehicle Power Charger and Travel Charger

The vehicle power charger, or the travel charger, recharges the attached battery and supplies power to the phone.

The vehicle power charger is connected to a 12 V, negative earth, cigarette lighter outlet in a vehicle.

The travel charger is to be used indoors, and it is connected to the mains.

Recharging a battery and powering the phone:

 Plug the vehicle power charger into the cigarette lighter outlet in the vehicle, or the travel charger into a mains socket.

- Plug the vehicle power charger, or the travel charger, into the receptacle at the bottom of the phone.
- If the phone is OFF, turn it ON.
 The recharging of a battery is controlled by the phone. To indicate that the battery is being recharge.

that the battery is being recharged, the bars of the battery meter walk from left to right in the display.

When the battery is fully recharged, all five bars show continuously.

A standard battery will be charged in less than 1 hour; a high-capacity battery in less than 2 hours.



If the phone does not come on when you turn it ON, the reason may be that the bat-

Accessories

tery is fully discharged. Wait a minute and then turn the phone ON again.



If you remove the travel charger from the mains socket, or the vehicle power charger from the cigarette lighter outlet, also disconnect it from the phone.



Some vehicles disable the cigarette lighter when the ignition is turned off.

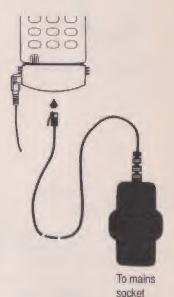
Portable handstree:

If a portable handsfree set is fitted to the phone, the vehicle power charger (the travel charger) can be used to power the phone from a cigarrette lighter outlet (from a mains socket).



Portable Handsfree:

Powering the phone from a cigarette lighter outlet



Portable Handsfree:

Powering the phone from a mains socket

Problems You Can Solve

This chapter describes simple things to do and check before calling for service personnel.

Phone Does Not Come On

Handheld phone:

Recharge or replace the battery. Refer to the chapter **Batteries** and **Recharging**.

Handstree phone in a vehicle:

If the phone comes on, but not the handstree equipment, ensure that the phone is properly inserted in its holder.

Check the fuse. The fuse holder is fitted to the battery cable, near the vehicle's battery.

Blinking Red Indicator Light Alarm Signal Sounds

The PWR indicator blinks in the display. The warning LOWBATTERY is displayed for ten seconds. This indicates that the battery is becoming exhausted. See the chapter Batteries and Recharging.

Steady Orange Indicator Light

The message DISCHARGE is displayed. This indicates that the battery is no longer able to power the phone satisfactorily and the phone has turned itself off. See the chapter Batterles and Recharging.

NO SVC (No Service) Shows Continuously in the Display

You have lost contact with the cellular network and you cannot make or receive any calls. The reason for this is either:

- The received signal is too weak.
 See the next section, Received Signal is Weak.
- You are in an area which is not covered by the cellular network.

Dual NAM:

If you subscribe to two networks, try changing to the phone number in the other network. Refer to the explanation of Special Function No. 8. NAM Selection in the chapter Special Functions.

Received Signal Is Weak

Move the phone or the vehicle and observe the signal strength reading in the display. The maximum reading is 5.

- The strength of the received signal varies from place to place, and often you need only move the phone by as little as 20 – 25 centimeters to obtain a stronger signal.
- Large obstacles such as buildings, hills and mountains can drastically affect the signal strength and you may have to move to obtain a sufficiently strong signal.
- Indoors, it is usually best to use the phone near a window.

Handsfree phone in a vehicle:

Ensure that the phone is properly inserted in its holder.

Check the external antenna and its connection.

ANTENNA is Displayed.

Turn the phone OFF. Attach the antenna.



Never remove or attach the antenna when the phone is ON.

LOCKED Is Displayed

The phone is locked, fully or partially, to prevent outgoing calls.

To unlock the phone temporarily:

If anything is shown in the numeric field of the display, erase it with the C key.

Enter your personal four-digit security code.

UNLOCK will be displayed briefly.

To unlock the phone permanently:

Refer to the description of Special Function No. 11. Electronic Lock in the chapter Special Functions.

If you have forgotten your security code:

Contact your dealer. The only way to unlock the phone is through using your security code.

KEYLOCK is Displayed

The keypad is locked to prevent unintentional key action.

Press M, followed by Power/End, to unlock the keypad.

No Feedback Clicks or Tones Are Heard when You Press the Keys

Turn the key clicks or key tones ON with Special Function No. 3, Key Clicks, Key Tones or Silent Keypad. Refer to the chapter Special Functions.

Appendix: Calling Line Identification

This facility can not be used unless it is supported by the cellular network you are using.

The Calling Line Identification (CLI) facility informs you of the caller's telephone number when you receive a call.

The CLI facility also includes a memory that holds up to ten (10) phone numbers - both answered and unanswered.

Incoming Call



If the phone is used with hands-free equipment, you can answer a call by pressing any key except the C

When an incoming call is received, the caller's number appears in the display, together with the message CALL.

The caller's number is automatically stored in the CLI memory.

- · If you answer the call, the caller's number disappears from the display.
- If you do not wish to answer the call, press C to interrupt the ringing signal. The caller's number disappears from the display.

Calls in Absence

If somebody has called you when you were away from the phone, the caller's number is stored in the CLI memory.

The caller's number, however, remains in the display. In addition, the message CLI is displayed, followed

by a digit 1 to 9. The digit indicates the number of unanswered calls: the digit 9 Indicates 9 or more unanswered calls.

Press Send or End. The message CLI disappears, but the caller's number remains in the display.

- To call the number, press Send.
- If you do not wish to call the number, but another number, erase the number from the display by pressing and holding down C. The number, however, remains in the CLI memory.



If a new call is received, the message CLI and the accompanying digit, 1 to 9, are replaced by the CALL message. The caller's phone number replaces the old number.

> If you move the phone into an area which is not covered by the cellular network, the message NO SVC (No Service) will replace the message CLI and the digit.

CLI Memory

Up to ten (10) answered and unanswered phone numbers can be stored in this memory.

The number last received is always stored in the first memory location. If more than ten calls are received. the oldest number will be lost.

A phone number will not be stored twice. If a number, which already is

Appendix: Calling Line Identification

present in the CLI memory, is received, the "old" number will be deleted.

Recalling a Number from the CLI Memory



 If no number is present in the CLI memory, the message NO CLI will be displayed briefly.

- Press R/S (Recall), followed by M (Mode). The latest number received is displayed.
- You can scroll forward or backward through the stored numbers with #▲ (up) and ▼* (down) respectively, until the desired number appears in the display.
- To call the number displayed, press just Send.

Erasing a Number from the CLI Memory

- Recall the number as described in the preceding section.
- Erase the number from the CLI memory and the display by pressing M, followed by C. The next number, if any, is displayed.

Transferring a Number to Permanent Storage

To transfer the number displayed to any of the memory locations of the phone's ordinary memory, press M, followed by R/S (Store), and then proceed as described in the chapter Storing Numbers earlier in this manual. The number will be automatically deleted from the CLI memory.



